

A Study on the Characteristics of Knitwear Fashion Design:

With a focus on Missoni, Sonia Rykiel, Azzedine Alaia

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Abstract *The purpose of this study is to better understand the development and characteristics of knitwear fashion design by examining the transformation process of the modern knits. The subjects of the study are Missoni, Sonia Rykiel, and Azzedine Alaia, designers who are world-renowned knit designers, and the expressive techniques in their designs will be evaluated. The study also intends to analyze the aesthetic value of each designer's style through their product's silhouette, colors, and knitting techniques. On the basis of the analysis, we hope to research the factors in the designing process that will allow knits, which were made for practical purposes, to be valued as a luxury fashion item, and with the results, show the potential for knits in expanding its domain in fashion to become a more luxurious, creative fashion item. The characteristic comparison of the designers is as follows: First, in the case of colors, Missoni shows its distinct identity through a balance of splashy colors as well as nature-inspired color composition and balance. And, only with color use, is also able to express perspective, form composition, and rhythm. Sonia Rykiel designs are composed of black backgrounds with strong primary colors that are contrasted with one-point or stripes to express a light, urban image. Alaia emphasizes femininity by the use of black and white colors, which show modernity, in combination with neutral skin-toned colors, such as beige and gray. So, in other words, Missoni and Sonia Rykiel mixed colors for visual interconnectivity, while Alaia expressed femininity through the use of an achromatic color. Second, in the case of knitting techniques, Missoni uses the jacquard technique to make complex patterns that show balance of colors and patterns such as zigzag, stripe, geometries, and titan check, which are geometric, abstract, and symmetric. Sonia Rykiel who uses stripes as her trademark, most often utilizes the intarsia technique, which is expressed through one-point. Alaia combines diverse techniques, such as the Skashi weaving, by using computerized knitting. Third, as for silhouettes, Missoni eliminated exaggerated details in order to emphasize the flashy colors and delicate patterns and weavings of its designs, and this resulted in simplistic and relaxed silhouettes. Sonia Rykiel took advantage of the elasticity that the knit offers to get a tight silhouette, and in turn, emphasized the female sensuality. Alaia used curvilinear cuts that emphasized the womanly curves and gained an image considered soft and feminine.*

Key words *Fashion Knit, Missoni, Sonia Rykiel, Azzedine Alaia*

Introduction

Fashion, as a symbolic language that reflects societal views, molds culture and reflects the lifestyle of the times. Due to a change in lifestyle and income, in addition to an improvement in the cultural level in today's world, demand for fashionable knits that are functional and easy to wear has increased. When looking at knitwear from the perspective of production, the ability to change the forms during the weaving process make it possible to produce diverse types of knits in small quantities, which in turn, means that it has the advantage of being able to respond quickly to the fast-changing fashion trends. From the design perspective, even if different knits have the same style, diverse designs can be expressed through the use of different yarns with varying degrees of thickness, as well as the application of various knitting patterns. Also, the advantages of knits such as its elasticity, heat retention, flexibility, and wrinkle resistance, have the effect of enhancing the look of the body's silhouette, while at the same time, making it comfortable for people to wear. In the past, knitwear was understood to be practical article of clothing that was just a product of women's traditional techniques, but this all changed in the 1970's. Knitwear patterns were re-discovered and were interpreted in new ways through diverse ideas, color, texture, and designs. Thanks to these developments, today's consumers demand knits that go beyond basic functionality, and want knits with designs and functions that fill their improved sensitivity and lifestyle. This has led to fashion designers including knitwear in their collections, and it becoming considered as a part of the "sporty informal look"category. Knitwear, which was showing momentum in as sports casual attire, began to develop as a branch of art clothing in the 1960's through textile artists; and it has developed even further in the 21st century, as it has become part of underwear, formal wear, casual wear, sports wear, dress, and props. Also, knitwear is having an ever-increasing presence in the collections of famous designers, and brands that specialize in knitwear have started to appear as well.

The purpose of this study is to better understand the development and characteristics of knitwear fashion design by examining the transformation process of the modern knits, and go evaluate the expressive techniques in the designs by analyzing the aesthetic value of each designer's style through their product's silhouette, colors, and weaving techniques. By studying the aesthetic values that the world-renowned fashion designers pursue, we hope to research the factors in the designing process that will allow knits, which were made for practical purposes, to be valued as a luxury fashion item, and with the results, show the potential for knits in expanding its domain in fashion to become a more luxurious, creative fashion item.

This research was intended to get a better understanding of the characteristics and weavings that the knits have, as well as the designs that are expressed in modern fashion knits. The characteristics of its design, techniques and weaving, and concept were evaluated through literature review, and world-renowned knit designers *Missoni*, *Sonia Rykiel*, and *Azzedine Alaia*, were chosen as subjects to get differentiated characteristics of knits. Photos of collections from 2000-2013 were used as the main source of materials for the analysis. 300 photos were chosen from approximately 12,000 photos (5736 photos from *Missoni* collections, 5112 from *Sonia Rykiel*, and 169 from *Alaia*) after eliminating the photos that

lacked distinct characteristics. 10 knit designers were involved in the selection process, and they chose the photos that reflected distinct characteristics for silhouette, color, and knitting technique. Content analysis was performed after the photos were separated into corresponding categories. Since *Alaia* does not hold many shows for their collections, 3000 pictures from their haute couture collections were used.

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Knit Types and Techniques

Concept of Knit

The origin of the word *Knit* was derived from the Old English word "cnyttan", and it means "fabric made of hand". Knits refer to textiles that are made by a repetitive process of making a loop with a thread and then connecting that loop with another loop of the thread. Any material that has the form of a thread can be used to make knit, and depending on the tool or the method, diverse types of weavings can be made. The word *Knitting* in Korean is referred to as *jae-pyon*(재편) and *pyon-sung*(편상), and the products of knitting are referred to as *pyon-sung-mool*(편성물), *jae-pyon-mool*(재편물), and *pyon-mool*(편물).

Knitwear refers to all the clothes that are made by knitting, and there are two types of knitting, hand knitting and machine knitting. The knitting process involves either cutting and sewing an already developed shape or making a shape, and then sewing it. Products that are made of knitting include sweaters, knitted suits, shirts, polo shirts, underwear, socks, gloves and hats.

Knit Types and Techniques

Knits can be categorized into two types, hand knits and machine knits. Hand knits can make diverse patterns using crochet lacing, such as bamboo needle stitch, chain stitch, single crochet, and half-double crochet, which are all derived from basic weaves, such as knit stitch and purl stitch. Hand knits take a long time and is able to express relatively simple weavings, and machine knits are used to complete diverse knits in a short amount of time. Machine knits can be divided into weft knits, which form loops horizontally in accordance with the knitting principle, and warp knits, which knit the loops vertically. Weft knits are divided into flat knitting, used mainly to make sweaters, and circular knitting, used for jerseys.

The basic weaves of weft knitting fabrics are categorized into plain stitch, rib stitch, purl stitch, and interlock stitch. Sonia Rykiel uses plain stitches in order to express designs such as stripes with diverse color arrangements, intarsia in one-point, and intarsia in trompe-l'oeil. The derivative weaves that stemmed from the basic weaves are tuck stitch, miss stitch, lace stitch, and cable stitch, and Alaia mixes these weaves in order to come up with new techniques.

Knitting techniques that apply color arrangements can be classified into two categories: Sonia Rykiel's intarsia weaves and Missoni's jacquard weaves. Jacquards are separated into seven different categories (normal jacquard, bird's eye jacquard, floating jacquard, tubular jacquard, ladder's back

jacquard, blister jacquard, transfer jacquard), and the classification is dependent on the backside's weaving. The basic weaves of warp knitting are Denbigh stitch, cord stitch, and atlas stitch. Missoni's zigzag pattern is expressed well through the use of the atlas stitch. Warp knitting has good productivity and does not get loose easily, however it is made using the same cutting and sewing technique as a woven fabric. Other types of knitting that point to development in the modern knit fashion are whole garment technique, integral knitting, and A-POC.

The Physical Characteristics of Weft-Knitted Weaving

The basic weave of weft knitting is plain stitch weave, with one side knit-stitched and the other, purl-stitched. It is used widely due to its lightness and thinness. Rib stitch is rib weave, with the inside and the outside being the same. The weave can be changed in different proportions such as 1:1, 2:1, and 2:2, and it has good elasticity. Purl knitting have two-sided weaves, and so the inside and the outside of the knit have the look of a purl stitch. Interlock stitch have good elasticity and the inside and outside have the same look as a rib stitch with a proportion of 1:1.

The surface of the tuck stitch, which is a derivative weave, has an embossed feel, and it is thick and sturdy. Miss stitch has a washboard weave; it is thick and lacks elasticity. Lace stitch is a Skashi weave, and its pattern is expressed through holes, and so is cool.

Cable stitch is also referred to as twist weave, and is useful for making bulky sweaters.

Intarsia, a color arrangement technique, is most effective in expressing color patterns with distinct boundaries. Normal jacquard, the first type of jacquard technique, has good horizontal elasticity, and it gets thick as the frequency of the knitting goes up. Bird's eye technique, the second jacquard technique, skips a loop, and so is thin and useful for summer clothes. Thirdly, floating jacquard is also called a punched card jacquard, and the threads in the backside are floating. The fourth type is the tubular jacquard, also called Hoo-Koo-Ro jacquard in Korea, is used for thick weaves, and the inside and outside patterns are expressed through color arrangements. Ladder's back jacquard, the fifth type, is the weave between the tubular and floating jacquards, and the backside has vertical lines. Blister jacquards, the sixth type, has a swollen pattern, and is effective in three-dimensions. Lastly, the transfer jacquard is a type of weaves that shows the backside thread on the surface. Whole garment technique, a type of seamless knit weave, is knitted with one article of clothes, and so there is no loss of materials while making cuts or seams. For integral knitting, all the production process and post-production process steps are taken during the knitting process. Lastly, Issey Miyake and Dai Fujiwara developed A-POC, and its characteristics include not having a post-production process, and minimal waste of materials during the knitting process.

Design Characteristics of Knit Products Analysis

Missoni

Background

Missoni, known as "magician of color and knit", has made knit making into art through the use of color in knits, and has expanded knits, considered not fashionable at one point, into a fashion wear in various type of formal and casual settings. Ever since the inception of its brand, the Missoni collection has continually transcended the times by developing knits with a mix of freshness and deep mysterious colors. Missoni, a brand that has been at the forefront of family management, has develop its unique color arrangements and patterns in diverse items from clothing, bags, umbrellas, neckties, and scarves to carpets and bed sheets. Missoni designs have had regional influences from Nordic countries (i.e. Finland) and Africa as well as art trends of the informal culture of the West, abstract art, Bauhaus, and Paul Klee. Its place in art can be noted by the fact that famous works of Missoni are already stored at The Metropolitan Museum of Art - The Costume Institute. In 1973, Missoni received the Neiman Marcus Fashion Award, considered the "Oscars of Fashion Industry" and in 1978, through a knit exhibition that was held at the Whitney Museum of American Art in New York, was recognized as an artist.

Design Characteristics

The characteristics of a Missoni image are that of complex patterns and colorscheme. It is a brand that has used the harmonious nature-inspired color associations to get a distinct identity. By melding the colors in its knitting process, it has used diverse color tones and shades to provide perspectives, forms, organization, and dynamics to its design. They use color to show the visual effect of simultaneous contrast by arranging fancy color lines in patterns. They achieve juxtapositional mixture between colors through the organization of the knit weaves, the zigzag patterns, and the multi-stripes. They also produce patterns that are only possible through warp knitting machines, which are specially made machines similar to a weaving loom. The atypical patterns, which were influenced by artworks of Soviet Union's structuralism and American abstract expressionism, were expressed through deformation. The complex patterns, achieved with the jacquard technique, have a magical balance of colors, giving the pattern a sense of balance, geometry, and abstraction, and makes it seem like a piece of art. By breaking away from traditional standards, Missoni has produced different forms of everyday wear, formal wear, and humorous fashion items flavored with patchwork, and also, through continuous development of color and fabric, has come up with a diverse and three-dimensional color mixture effect by using fancy yarns, such as boucle yarn, slub yarn, and knot yarn. Another design characteristic is the diversification of silhouettes. Also, in regards to colors, Missoni has mainly used medium-toned colors in favor of strong primary colors. The strength of Missoni comes from its groundbreaking knits made possible by promoting technical developments as well as creating diverse silhouettes.

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Fig. 1.
Missoni

<Pic. 1> the cardigan matches the cool blue color, with a lavender feel, with ivory and beige through the use of the jacquard weaving, which gives it softness and warmth. This is worn with a soft blue and lavender-colored pullover that complements the cardigan well, and provides a gradation effect.

<Pic. 2> the tonal color arrangements of light yellow, brown, and ivory give it a natural feel, and provides the effect of seamless transition between the colors.

<Pic. 3> a knit one-piece dress that expresses softness by achieving visual mixture of the coral pinkish and mustard yellowish colors via zigzag patterns through single atlas-stitched warp knitting.

<Pic. 4> a zigzag pattern using a soft pastel tone as its base with a bold batch of monotone gray. It was warp-knitted with atlas stitch construction, and the pattern feel is emphasized more than the existing visual color mix.

<Pic. 5> the horizontal stripes of the knit pullover is achieved through the balance of yellow-brownish colors. The vertical stripes are achieved by using Denbigh stitch and atlas stitch together.

Sonia Rykiel

Background

Sonia Rykiel, who has been called "today's Coco Chanel", is recognized as a pioneer of unique knits for women and is a 1st generation off-the rack designer in Paris. Just like Chanel, she has pioneered in putting unique designs in everyday clothes. For the past 40 years, she has gone against the grain of

the constant renewing of collections, and has been at the forefront of the industry through her "non-fashion", which is achieved by melding classicism and modernism in her design. Since her move to designing everyday wear in the early 1960's, she has rejected the limiting styles of haute couture, and instead has embraced the French avant-garde style, which had a younger, more modern image. Due to the strengthening of women power in the 1970's, there was an increase in the number of women in the professional fields, and in turn, an increase in demand for practical and comfortable clothes for them. She is known for knit designs that meld classic and modern features exceptionally well, and has earned the moniker, "queen of knits", by developing designs that turned knits into trendy fashion wear.

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Design Characteristics

For Sonia Rykiel, the color black has become a trademark of hers, along with her red hair, and she considers it a color that resists conventions, as well as a color that represents freedom and elegance. She uses it to get color harmony that surpasses expectations. She often applies strong primary colors that contrast the black background to get one-point colors, and through it, expresses a modern urban image. Also every year, she applies an moderate amount of the particular year's color in trend along with black to produce a stripe design with black and primary colors, which gives off a bright active image. Overall, the designs are composed of trapeze silhouettes, tight silhouettes that bring out the female sensuality, and loose feminine silhouettes with black and bright colors co-existing together. Design expression through knitting is an important factor that differentiates Sonia Rykiel from other designers. The stripe pattern, which can be simply made with a weaving loom, is consistently used as her trademark in her collections. Also, intarsia and trompe-l'oeil, techniques expressed through hand knitting and weft knitting,



Fig. 2.
Sonia Rykiel

are used to express her seasonal themes. Another characteristic of Rykiel is that her woven designs use diverse subsidiary fabrics to counter the monotonous silhouettes that can result from woven knits. She also uses other colors in her knitting to contrast black or uses black as a background to accentuate other colors, and in turn, transforms the heavy and dark image into a cheerful urban image.

<Pic. 6> ivory-colored base with a yellowish tonal combination was achieved through trompe-l'oeil intarsia knitting

<Pic. 7> dark color, which is commonly seen, is used as base along with red to express a pattern that emphasizes the sexy silhouette through the application of the intarsia knitting

<Pic. 8> Reverse plain weave, a basic weave of weft knitting that Rykiel applies often, was used on the surface of the knit to produce a color block stripe. Dark colors are combined with warm rainbow colors in the knit

<Pic. 9> blue, one of the main colors of Rykiel, is applied on the knit with repetitive stripes, and is achieved through trompe-l'oeil intarsia knitting to give off a kitsch feel

<Pic. 10> a stripe pattern with 1:1 combination of black base and pink achieved through plain weave, the most basic type of weft knitting, that gives off the simple feminine feel

Azzadine Alaia

Background

Alaia is a Tunisian designer who was dubbed "Titan of Tight" and "King of Cling" by Georgina Howell and Women's Wear Daily, respectively. His designs were more concerned with the way the clothes were worn than the actual clothes; he is famous for modern tight-fitting clothes. Through his self-developed techniques, his designs have a simple and clear finish and produce a modern and slender silhouette that shows off the wearer's voluptuousness. He has created clothing that maintains the tight form of the body while being able to accommodate the minute movements of it. Even though he rose in prominence during the 1980's, he has maintained his image as a "couturier" by putting on shows for his collections only when he feels that he is ready, which goes against the typical designers who put on 4-5 shows a year. In addition to putting on 2 shows a year, he has maintained his image through producing only small amounts of orders. In 1985, he received the Designer of the Year award from the French Ministry of Culture.

Design Characteristics

Alaia prefers to use the colors, white, beige, gray, and black, instead of going with the colors in trend, and unlike Missoni and Rykiel, who like to show the interrelationship between colors, he likes to use one color to express minimalism, which has become his identity. He is known for using black, white and neutral colors to express the softness of women. Also, though there are slight changes depending on the seasons, he prefers colors that are tone downed or dark rather than bright and vivid

colors, and warm colors, such as wine and red to cold colors. He was inspired by bias cut, a multi-seaming technique introduced by Madeleine Vionnet, and through repeated draping, fitting and trimming on the body of a real model, he developed trims that enhanced and emphasized the curvy body of women while melding with the modern preferences of women. This enabled him to create clothing that had a feminine image rather than a sexy image. The elastic dresses that wrap the body, the tops and leggings that stick to the skin can be considered Alaia's creation. Also, he uses sleek fabric such as lycra, viscose, and chenille, to emphasize the softness of the curves. The design characteristics of Alaia is that it mixes diverse weaves such as the Skashi weave through the use of computer knitting to develop and give a new look to its signature items instead of coming up with new items. Even though, Alaia's weaves are excellent at expressing femininity, there is a limitation to its knitting due to the yarn.

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2007 f/w	2007 f/w	2007 f/w	2011 f/w haute couture
Figure 11	Figure 12	Figure 13	Figure 14
Azzedine Alaia Design characteristics of representative works (Source from: www.firstviewkorea.co.kr) Paris Collection			

Fig. 3.
Alaia

- <Pic. 11> one-piece dress that has a bias silhouette, achieved though rotating the fabric 90 degrees during the computer knitting
- <Pic. 12, 13> styles that achieved its three-dimensional look by re-knitting the stitches after the initial computer knitting, the scallop neckline in <pic. 13> was used to express femininity
- <Pic. 14> the neckline and the armhole in the design have a zigzag shape, which was achieved by attaching separately knitted parts after the basic weave was completed

Conclusion

The comparisons of the each designer's characteristics are as follows.

First, color comparison shows that Missoni shows a distinct identity through the use of a balanced color combination of nature-inspired colors and vibrant colors. Only through the use of color, it has achieved perspective, form, organization, and a sense of rhythm in its designs. It uses medium-toned colors, which convey naturalness and comfort, rather than vibrant primary colors. Sonia Rykiel expresses light, urban image in her designs by using vibrant primary colors in stripes and one-points that contrast with the black background. Alaia uses black, white and neutral colors to express the softness of women. Missoni and Sonia Rykiel like to mix colors to show the interrelationship between the colors, and Alaia likes to use one achromatic color to express femininity.

Second, comparison of the knitting technique shows that Missoni uses the jacquard technique, which is used to produce complex weaves composed of patterns that are geometric, abstract, and balanced, such as zigzags, stripes, geometries, and tartan checks. Sonia Rykiel uses the stripe pattern as her trademark and mainly applies the intarsia technique expressed in one point. Alaia applies a mixture of diverse weaves such as the Skashi weave through computer knitting.

Third, comparison of the silhouette shows that Missoni's attempt to emphasize vibrant colors and elaborate patterns and weaves, by eliminating complicated or exaggerated details, has resulted in a simple and moderate silhouette. Sonia Rykiel has a tight fitting silhouette made possible through the use of elastic knit, which emphasizes women's sensuality. She has created silhouettes characterized by its tight fit and high and narrow armholes. Alaia has achieved a silhouette with trims that emphasize women's curves, which has given it a feminine image.

Each brand has acquired a distinct image through its designs, knitting techniques that represent the brands, and fabrics that are comfortable and practical. These brands are good guideline for Korean designers to follow. A study of these brands that have maintained their position at the top of the fashion industry, even as the demands of the consumers are getting more refined and diverse, should be done to find direction for the Korean knit industry. Their fashion knits have achieved distinct identities through its lasting characteristics, and the details and methods of their designs should be researched.

First, unique designs that are picturesque and visual through the use of painting motifs should be suggested. This can emphasize the strength of knits, as a canvas for design, and meet the current trends in fashion. Second, the yarn's texture, a knit material, can be expressed as delicate and rich through a dyeing process. New materials for knits should be developed through machines with a computerized system, and create added value to knits. Third, diverse methods of cutting and sewing of knits should be researched, and new material that is mixed with woven fabric could be suggested. However, it is a field that requires designers to have skills with high degree of technical knowledge such as general knowledge of knits, proper use of effective yarn, and mixing color, so continued research and development is needed. Lastly, by building SCM (supply chain management), an increased efficiency needs to be achieved between related businesses such as distribution channels.

References

- Ginberg, M. (1993). *The Illustrated History of Textile*. London: Studio Editions, 17.
- Alaia, A. (2011). *in the 21st century(2011)*. Groninger Museum · Bai Publishers.
- Golbin, P. (2001). *Fashion Designers*. New York. Watson Guptill.
- Isa Tutimo Vercelloni (1994). *op. cit*, 41.
- Kum, S., and 8 others (2002). *Modern Fashion 100 years*. Seoul. Gyomunsa.
- Kim, S. (1993). *Knitted Engineering*. Seoul: Munundang, 10.
- Kim, J., & Lee, J. (1995). *Knowledge in fashion-Covering material*. Seoul: Suhaksa, 108.
- Seoul-Incheon sweater Industry Cooperative (2004). *Sweaters technical manuals*. Seoul: Kyung sweater Industry Cooperative, 15.
- Fashion big advance Compilation Committee (1991). *Fashion big dictionary*. Seoul: Gyomunsa.
- Computer Internet IT terminology Dictionary, Board of computational lexicography term plaiting, 2011. 1. 20, Iljinsa.
- Kim, M. (2010). Sonia Rykiel Knitwear work on the analysis of the research. *Fashion and Knitting The Journal of the Korean Society of knit Design*, 8(1), 87-93.
- Kim, U. (2005). The late 20th century, the Italian fashion design studies: Focusing on women's wear, Graduate School of Techno Design Kookmin University doctoral dissertation, 234.
- Park, M. (2003). Application to knit tubes Knitwear Design Research. Ewha Womans University Master's Thesis, 3.
- Lee, G. (2009). Knitwear with woven patch design research. Hongik University Master's Thesis, 83-85.
- Lee, S., Cho, J., & Lee, Y.(2009). Sonia Rykiel knitwear collection color characteristics shown in. *Korea Institute of Fashion Design*, 9(3), The Korean society of Fashion Design, 1-12.
- Lee, H. (1996). Study on the Characteristics of knitwear design, Sunghsin Woman's University Master's Thesis, 69-79.
- Lee, M. (2002). Knitwear design study on the characteristics of a service organization(Focused on Jacquard composition), Dongduk Women's University Graduate School of Design Master's Thesis, 25-28.
- Yu, G., & Lee, Y. (2006). *Jacquard knit costume design study using tissue*. Knit Design Institute of Korea, 10.
- Yu, J., & Lee, Y. (2011). Antoni Gaudi's work an image of a knit design transient Cadiz. *Costume Culture The Research of the Costume Culture Research*, 19(4), 760.
- Yun, J., & Lee Y. (2010). Variably expressed in modern fashion design knit. *The Journal of the Korea Society of Clothing and Textiles*, 34(11), 1816.
- Choi, K., & Lee, S. (2006), Knit Fashion design development direction of modern. *Fashion Information and Technology*, 3, 49.
- Choi, G. (2010). Sonia Rykiel knit design characteristics of the study, *Journal of Korea*, 19(5), 876.
- Choi, H. (2009). Fashion and Knitting. *The Journal of the Korean Society of Knit Design*, 7(1), 106.

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- Choi, H. (2012). Study on Aesthetic Characteristics of Missoni knitwear. *Fashion and Knitting*, 10(3), 93.
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Data retrieval date: 2013, April http://navercast.naver.com/contents.nhn?rid=135&contents_id=9116
Data retrieval date: 2013, April <http://blog.naver.com/nuri2037?Redirect=Log&logNo=158993117>
Data retrieval date: 2013, April http://navercast.naver.com/contents.nhn?rid=135&contents_id=7554
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Data retrieval date: 2013, April <http://olv.moazine.com/rviewer/index.asp>